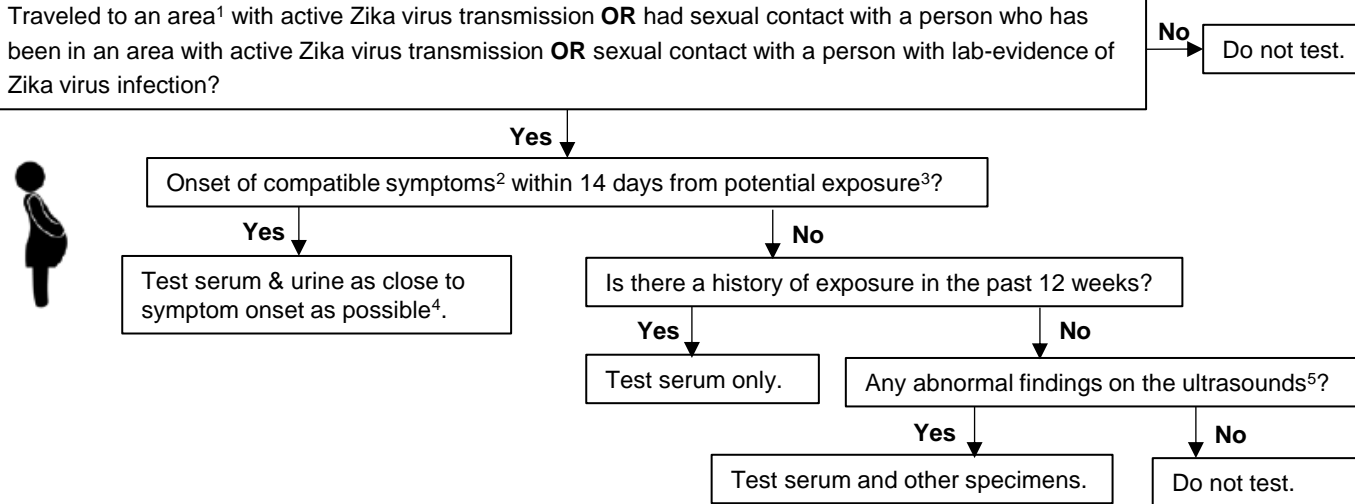


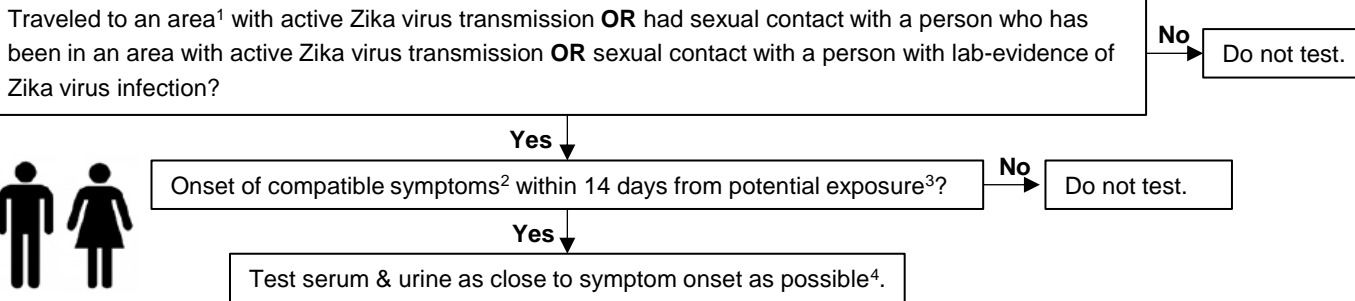


ZIKA VIRUS TESTING RECOMMENDATIONS

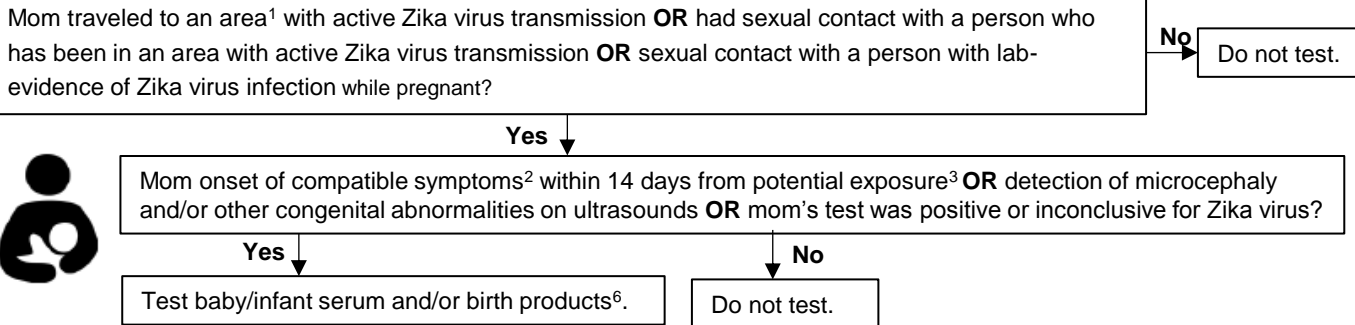
Pregnant Females



Males, Non-Pregnant Females, and Children



Babies and Infants (Possible Congenital Infection)



1. Areas with active Zika virus transmission are listed in the CDC's website: <http://www.cdc.gov/zika/geo/index.html>
2. Fever, conjunctivitis, rash, arthralgia (joint pain), myalgia (muscle pain), and/or headache.
3. Exposures include: Traveled to an area with active Zika virus transmission OR had sexual contact with a person who has been in an area with active Zika virus transmission OR sexual contact with a person with lab-evidence of Zika virus infection.
4. A convalescent sample (collected 14 days after onset) may be requested if negative or equivocal findings are found.
5. Do not collect specimens at this time. Patient should continue routine prenatal care until abnormal findings on ultrasounds are detected, suggesting microcephaly and/or other birth defects/congenital abnormalities.
6. Birth products can include umbilical cord tissue, cord blood, placental tissue, fetal tissue, and others. Please consult ODH at 614-995-5599 for additional guidance.

Contact the Ohio Department of Health at (614) 995-5599 for any questions related to Zika virus disease testing.



ZIKA VIRUS TESTING RECOMMENDATIONS

Specimen Collection:

- **Serum:** Single serum specimens are acceptable for Zika virus real-time Reverse Transcriptase Polymerase Chain Reaction (rRT-PCR) and antibody testing. A convalescent serum specimen may be requested depending on results of acute specimen testing.
 - Collect 1.0 mL of blood into a serum separator tube.
 - Keep the serum refrigerated until ready to ship.
- **Cerebrospinal fluid:** Cerebrospinal fluid specimens are acceptable for Zika virus rRT-PCR and antibody testing, although they should only be submitted if collected for other purposes
 - Collect 1.0 mL of cerebrospinal fluid into a tube.
 - Keep the specimen refrigerated until ready to ship.
- **Amniotic fluid:** rRT-PCR and virus isolation can be performed on amniotic fluid, although the performance of rRT-PCR testing of amniotic fluid for Zika virus infection is currently unknown.
 - Collect 1.0 mL of amniotic fluid in a sterile container.
 - Keep the specimen refrigerated until ready to ship.
- **Urine:** rRT-PCR can be performed on urine collected less than 14 days after illness onset. If urine is collected, a serum specimen for the patient should be collected as well for testing. [Further information is available on CDC's Zika website.](#)
 - Collect 1.0 mL of urine in a sterile container. Urine should be collected before semen if both are being submitted for the same person.
 - Keep the specimen(s) refrigerated until ready to ship.
- **Other body fluid:** rRT-PCR and virus isolation can be performed on other body fluids, such as semen and saliva. However, the performance of RT-PCR testing of other body fluids for Zika virus infection is currently unknown. [Further information is available on CDC's Zika website](#)
 - Collect 1.0 mL of semen in a sterile container. Urine should be collected before semen if both are being submitted for the same person.
 - Collect saliva with a dry cotton swab and place in a tube with 1.0 mL of viral transport media.
 - Keep the specimen(s) refrigerated until ready to ship.
- **Fetal tissues:** Tissues may be submitted for infants or fetuses with suspected congenital infection for rRT-PCR, antibody testing, histopathology, or immunohistochemical staining. Fetal tissues may include cord blood, placental tissue, brain tissue, or autopsy tissues. Further information is available on [CDC's Zika website.](#)
 - Collect 1.0 mL of cord blood into a serum separator tube.
 - Provide both formalin-fixed (preferred) and frozen tissues for each type of tissue submitted; if it's not possible to submit both, prioritize formalin-fixed tissues.
 - Collect brain tissue, maintaining the structure of the brain architecture for evaluation of viral neuropathology.
 - Sample placental tissue extensively, including full thickness pieces, section of the placental disk, membranes, umbilical cord, and pathologic lesions when possible.
 - Provide 0.5-1.0 cm of autopsy samples of each major organ (heart, lungs, liver, kidneys, skeletal muscle, bone marrow). Sampling of the eyes is highly recommended.
 - Place tissues into sterile containers containing adequate formalin.
 - Store frozen tissues at -70°C until ready to ship.
 - Keep fixed tissues at room temperature until ready to ship.

Serum is the preferred specimen for Zika virus testing. If submitting a specimen other than serum, it is recommended to also collect and submit a serum specimen for the patient.



ZIKA VIRUS TESTING RECOMMENDATIONS

Specimen Shipping:

- Notify the local health department about the suspected case.
- Complete the [CDC's Specimen Submission Form](#) to accompany the specimen(s).
 - Select "Arbovirus Serology" from the drop-down menu for Test Order Name.
 - Include the date of illness onset and the specimen collect date. Leave the illness onset date blank if the patient was asymptomatic.
 - The healthcare provider can fill his/her information in the Original Submitter section to receive a copy of the results.
 - If the specimen is being drawn by a different facility, the lab can fill its information in the Intermediate Submitter section to receive a copy of the results.
 - The Travel History section on the second page needs to be filled out with the areas traveled to and dates of travel.
 - The Brief Clinical Summary section on the second page needs to be completed with the patient's signs and symptoms. If the patient is pregnant and asymptomatic, please note that in this section.
 - In the Comments section at the bottom of the second page, "Zika, chikungunya, and dengue testing requested" can be filled in. Previous arboviral test results for the patient should be noted here as well, including both positive and negative results.
 - The form should be filled out electronically and then printed. If the form cannot be accessed online, it can be printed and filled in by hand.
- Complete [ODH Lab's Microbiology Submission](#) Form to accompany the specimen(s).
 - Enter "Zika virus" in the Agent Suspected field.
 - Fill in the bubble appropriately in the Specimen Type & Site section.
- Ship serum, cerebrospinal fluid, amniotic fluid, urine, and other body fluids on frozen freeze packs.
- Ship frozen tissues on dry ice.
- Ship fixed tissues at room temperature and separate from specimens requiring freeze packs or dry ice.
- Do not ship specimens for weekend delivery unless otherwise instructed by ODH Laboratory.
- Ship specimens to:
 - Ohio Department of Health Laboratory
 - ATTN: Microbiology Labs
 - 8995 E. Main St.
 - Building 22
 - Reynoldsburg, OH 43068

Contact Information:

- ODH Zoonotic Disease Program
 - Phone: (614) 995-5599
 - E-mail: Zoonoses@odh.ohio.gov
- ODH Laboratory
 - Phone: (888) ODH-LABS
 - E-mail: ODHLabs@odh.ohio.gov